

(2) *Moderate sun protection product.* A sunscreen product that provides an SPF value of 12 to under 30.

(3) *High sun protection product.* A sunscreen product that provides an SPF value of 30 or above.

(c) *Sunscreen active ingredient.* An active ingredient listed in § 352.10 that absorbs, reflects, or scatters radiation in the UV range at wavelengths from 290 to 400 nanometers.

(d) *Sun protection factor (SPF) value.* The UV energy required to produce an MED on protected skin divided by the UV energy required to produce an MED on unprotected skin, which may also be defined by the following ratio:  $\text{SPF value} = \text{MED (protected skin (PS))} / \text{MED (unprotected skin (US))}$ , where MED (PS) is the minimal erythema dose for protected skin after application of 2 milligrams per square centimeter of the final formulation of the sunscreen product, and MED (US) is the minimal erythema dose for unprotected skin, i.e., skin to which no sunscreen product has been applied. In effect, the SPF value is the reciprocal of the effective transmission of the product viewed as a UV radiation filter.

### Subpart B—Active Ingredients

#### § 352.10 Sunscreen active ingredients.

The active ingredient of the product consists of any of the following, within the concentration specified for each ingredient, and the finished product provides a minimum SPF value of not less than 2 as measured by the testing procedures established in subpart D of this part:

- (a) Aminobenzoic acid (PABA) up to 15 percent.
- (b) Avobenzone up to 3 percent.
- (c) Cinoxate up to 3 percent.
- (d) [Reserved]
- (e) Dioxybenzone up to 3 percent.
- (f) Homosalate up to 15 percent.
- (g) [Reserved]
- (h) Menthyl anthranilate up to 5 percent.
- (i) Octocrylene up to 10 percent.
- (j) Octyl methoxycinnamate up to 7.5 percent.
- (k) Octyl salicylate up to 5 percent.
- (l) Oxybenzone up to 6 percent.
- (m) Padimate O up to 8 percent.

(n) Phenylbenzimidazole sulfonic acid up to 4 percent.

(o) Sulisobenzene up to 10 percent.

(p) Titanium dioxide up to 25 percent.

(q) Trolamine salicylate up to 12 percent.

(r) Zinc oxide up to 25 percent.

[64 FR 27687, May 21, 1999]

EFFECTIVE DATE NOTE: At 67 FR 41823, June 20, 2002, § 352.10 was amended by revising paragraphs (f) through (n), effective Sept. 1, 2002. This amendment could not be incorporated because at 66 FR 67485, Dec. 31, 2001 the effective date was stayed until further notice. For the convenience of the user, the text is set forth as follows:

#### § 352.10 Sunscreen active ingredients.

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- (f) Ensulizole up to 4 percent.
- (g) Homosalate up to 15 percent.
- (h) [Reserved]
- (i) Meradimate up to 5 percent.
- (j) Octinoxate up to 7.5 percent.
- (k) Octisalate up to 5 percent.
- (l) Octocrylene up to 10 percent.
- (m) Oxybenzone up to 6 percent.
- (n) Padimate O up to 8 percent.

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#### § 352.20 Permitted combinations of active ingredients.

The SPF of any combination product is measured by the testing procedures established in subpart D of this part.

(a) *Combinations of sunscreen active ingredients.* (1) Two or more sunscreen active ingredients identified in § 352.10(a), (c), (e), (f), and (h) through (r) may be combined with each other in a single product when used in the concentrations established for each ingredient in § 352.10. The concentration of each active ingredient must be sufficient to contribute a minimum SPF of not less than 2 to the finished product. The finished product must have a minimum SPF of not less than the number of sunscreen active ingredients used in the combination multiplied by 2.

(2) Two or more sunscreen active ingredients identified in § 352.10(b), (c), (e), (f), (i) through (l), (o), and (q) may be combined with each other in a single product when used in the concentrations established for each ingredient in § 352.10. The concentration of each active ingredient must be sufficient to